

"Express Mail" mailing label No. EL185316743US

Date of Deposit June 21, 1999 I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Box PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231.

Bernardo Caycedo

(Typed or printed name of person mailing paper or fee)

1c574 U.S. PTO

06/21/99

1c594 U.S. PTO

09/333565

06/21/99

Patent

Attorney's Docket No. 003227-031

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

UTILITY PATENT  
APPLICATION TRANSMITTAL LETTER

**Box PATENT APPLICATION**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

Enclosed for filing is the utility patent application of Nicholas Steigelman and Ronald S. Lesniak for TELEPHONE-COUPLED DEVICE FOR INTERNET ACCESS.

Also enclosed are:

- ☒ 4 sheet(s) of ☐ formal ☒ informal drawing(s);
- ☐ a claim for foreign priority under 35 U.S.C. §§ 119 and/or 365 is ☐ hereby made to \_\_\_\_\_ filed in \_\_\_\_\_ on \_\_\_\_\_;  
☐ in the declaration;
- ☐ a certified copy of the priority document;
- ☐ a Constructive Petition for Extensions of Time;
- ☐ \_\_\_\_\_ statement(s) claiming small entity status;
- ☐ an Assignment document;
- ☐ an Information Disclosure Statement; and
- ☒ Other: Return postcard

The unexecuted declaration of the inventor(s) ☒ is enclosed.

C L A I M S					
	NO. OF CLAIMS		EXTRA CLAIMS	RATE	FEE
Basic Application Fee					\$760.00
Total Claims	11	MINUS 20 =	0	x \$18.00	
Independent Claims	2	MINUS 3 =	0	x \$78.00	0
If multiple dependent claims are presented, add \$260.00					
Total Application Fee					\$760.00
If verified Statement claiming small entity status is enclosed, subtract 50% of Total Application Fee					\$380.00
Add Assignment Recording Fee of \$40.00 if Assignment document is enclosed					
<b>TOTAL APPLICATION FEE DUE</b>					<b>\$380.00</b>

[x] The filing fee will follow.

Please address all correspondence concerning the present application to:

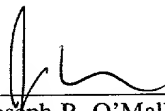
Robert E. Krebs  
Burns, Doane, Swecker & Mathis, L.L.P.  
P.O. Box 1404  
Alexandria, Virginia 22313-1404.

The Commissioner is hereby authorized to charge any appropriate fees under 37 C.F.R.  
§§ 1.16, 1.17 and 1.21 that may be required by this paper, and to credit any overpayment, to  
Deposit Account No. 02-4800. This paper is submitted in triplicate.

Respectfully submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

Date: 6/21/99

By:   
Joseph P. O'Malley  
Registration No. 36,226

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(650) 854-7400

"Express Mail" mailing label No. EL185316743US

Date of Deposit June 21, 1999 I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Box PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D.C. 20231.

Bernardo Caycedo

(Typed or printed name of person mailing paper or fee)

## TELEPHONE-COUPLED DEVICE FOR INTERNET ACCESS

### BACKGROUND OF THE INVENTION

There is a large market for guest telephones of the type used in hotels. Recently, many guests, especially business travelers, bring notebook computers to hotels. Most notebook computers support modem access to the external world. It is becoming more popular to have faster access across network ports. There has not yet been a standardized location for interconnecting the notebook to Internet using a network port. It is often unclear whether a hotel room has such a network port. If network ports are located in the hotel room, they are often hard to locate.

It is desired to have an improved apparatus for connecting notebooks computers with the Internet at hotel rooms.

### SUMMARY OF THE INVENTION

The present invention comprises an apparatus which is positioned underneath the guest telephone. The apparatus includes a shell with positions to allow for interconnection logic and a networking card. The interconnection logic allows voice

data from the telephone and Ethernet data from the notebook computer to pass along the hotel room telephone wire to the proper connection. In a preferred embodiment, the shell has a port region for connecting to the telephone wire, a wire for connecting between the apparatus and the guest telephone, and connection port for connecting to a notebook computer. Interconnection logic in the apparatus can be used to route the signals between the ports in the correct manner. The interconnection logic is set up to work with a variety of different types of available networking cards. In a preferred embodiment, the networking cards are Ethernet cards. The Ethernet cards in the apparatus allows the notebook computer to interconnect to a local area network at the hotel and then out to the Internet. By positioning the apparatus beneath the guest telephone, the network card is in a location which is convenient and intuitive for the guest.

Another embodiment of the present invention comprises a shell fitting underneath a guest telephone. The shell is wedge shaped to hold the telephone at an angle and has extensions to physically connect to the bottom of the guest telephone. The shell has port locations for connecting to the notebook and guest telephone.

#### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a block diagram that shows the interconnection of the apparatus of the present invention with other units.

Figure 2 is a block diagram that shows the apparatus of the present invention.

Figure 3A and 3B are perspective pictures of the apparatus of the present invention interconnected to a guest telephone.

Figure 4 is a diagram of the shell of one embodiment of the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

5        Figure 1 is a diagram that illustrates the interconnection of the apparatus 20 of the present invention with a guest telephone 24. In this system, the wire 26 from the public branch exchange (PBX) 28 connects to the apparatus 20 rather than directly to the guest telephone. This wire connection 26 can be a conventional telephone wire. The apparatus 20 also includes a connection to a notebook computer 29. This  
10       connection can be a direct connection such as with an RJ45 connection port or a wireless connection. Interconnection logic (not shown) in the apparatus 20 can direct the voice data from the guest telephone 24 or Ethernet data from the notebook computer 29 across the wire 26. Voice data is interpreted by the PBX 28 and sent out across the voice network 30. The ethernet data is interpreted by the ethernet  
15       multiplexer (MUX) 32 which is connected to the LAN 34 and allows interconnection to the Internet 36. The connections to the PBX 28 is done using analog signals and the connections to the Ethernet MUX 32 are done using digital signals. For this reason it is relatively easy for the PBX 28 and Ethernet MUX 32 to determine the correct signal and to filter out the unwanted signal.

Figure 2 is a block diagram illustrating the apparatus 40 interconnected to the telephone unit 42. The apparatus 40 includes interconnection logic 42 which allows switching between the port 44 connected to the notebook computer, port 46 connected to the telephone wire, and wire 48 connected to the telephone unit 42. The interconnection logic 42 routes the analog voice signals between ports 46 and 48; routes the signals from the notebook computer to the notebook card 50; and routes the Ethernet signals from the network card 50 out the port 46 to the telephone wire. Due to the passive filtering as discussed above, much of the connections in the interconnection logic can be simple connections. The network card 50 is preferably an Ethernet card such as the type which supports 10 base T Ethernet connections. The ports 44 and 46, includes port regions defined within the shell 52 of the apparatus.

Figure 3A and 3B are pictures which illustrate the apparatus of one embodiment of the present invention. Figure 3A shows the connection between the telephone unit and the apparatus of the present invention. The Figure 3B shows the interconnection port for connecting to the notebook computer. In a preferred embodiment, the apparatus of the present invention is wedge shaped so that it provides a tilt which makes it more convenient for the user of the telephone.

Figure 4 is a diagram of the shell 60 for one embodiment of the present invention. In a preferred embodiment, the shell includes a port region 62 for connecting to the notebook computer and a port region 64 for connecting to the telephone wire. The connection to the guest telephone can be done with a short

dedicated wire that can exit through a cut (not shown) at the back of the wedge. In a preferred embodiment, the shell 60 is wedge shaped. The shell also includes extensions 68 which connects to a conventional guest telephone. Often guest telephones include a stand to tilt the telephone. The extensions 68 fit into the guest  
5 telephone such as that of the apparatus of the present invention takes the place of the conventional telephone stand.

By taking the place of the stand, the apparatus of the present invention can be conveniently positioned underneath the guest telephone. The apparatus of the present invention is positioned close to the guest telephone and thus in an intuitively logical  
10 location to be checked for interconnection to a notebook computer.

It will be appreciated by those of ordinary skill in the art that the invention can be implemented in other specific forms without departing from the spirit or character thereof. The presently disclosed embodiments are therefore considered in all respects to be illustrative and not restrictive. The scope of the invention is illustrated by the  
15 appended claims rather than the foregoing description, and all changes with come within the meaning and range for equivalent thereof are intended to be embraced herein.

Claims:

1. An apparatus comprising:

a shell adapted to physically connect under a telephone, the shell having a port to connect to a telephone wire;

5 the shell containing interconnection logic operably connected to the ports and a wire to connect to the telephone; and

a networking card in the shell for connecting to a personal computer, the networking card being operably connected to the interconnection logic, wherein digital data from the network card and voice data from the telephone can be  
10 alternately sent across the telephone wire.

2. The apparatus of claim 1, wherein the shell is wedge shaped.

3. The apparatus of claim 1, wherein the shell has a port to connect to the personal computer.

4. The apparatus of claim 1, wherein electronics in the shell allow for a wireless  
15 connection to the personal computer.

5. The apparatus of claim 1, wherein the shell has extensions for physically connecting to the bottom of the telephone.



6. The apparatus of claim 1, wherein the network card is an Ethernet card.
7. A shell adapted for fitting under a telephone, the shell being wedged shaped to hold the telephone at an angle, the shell having extensions for physically connecting to the bottom of the telephone, the shell defining a first port region for connecting to telephone wire and a second port region for connecting to a personal computer.
8. The shell of claim 1, wherein the shell is hollow at top.
9. The shell of claim 7, wherein the shell has enclosed sides.
10. An apparatus including the shell of claim 7, the apparatus further comprising a network card.
11. An apparatus including the shell of claim 7, the apparatus further comprising interconnection logic.

Abstract

An apparatus is provided which can be physically connected underneath a guest telephone in a hotel. The apparatus is set up with interconnection logic and a networking card so as to allow for a notebook computer to interconnect with a local area network in the hotel. The apparatus is set up to switch between sending a voice data from the guest telephone or computer data packets from the notebook computer across the hotel room telephone wire.

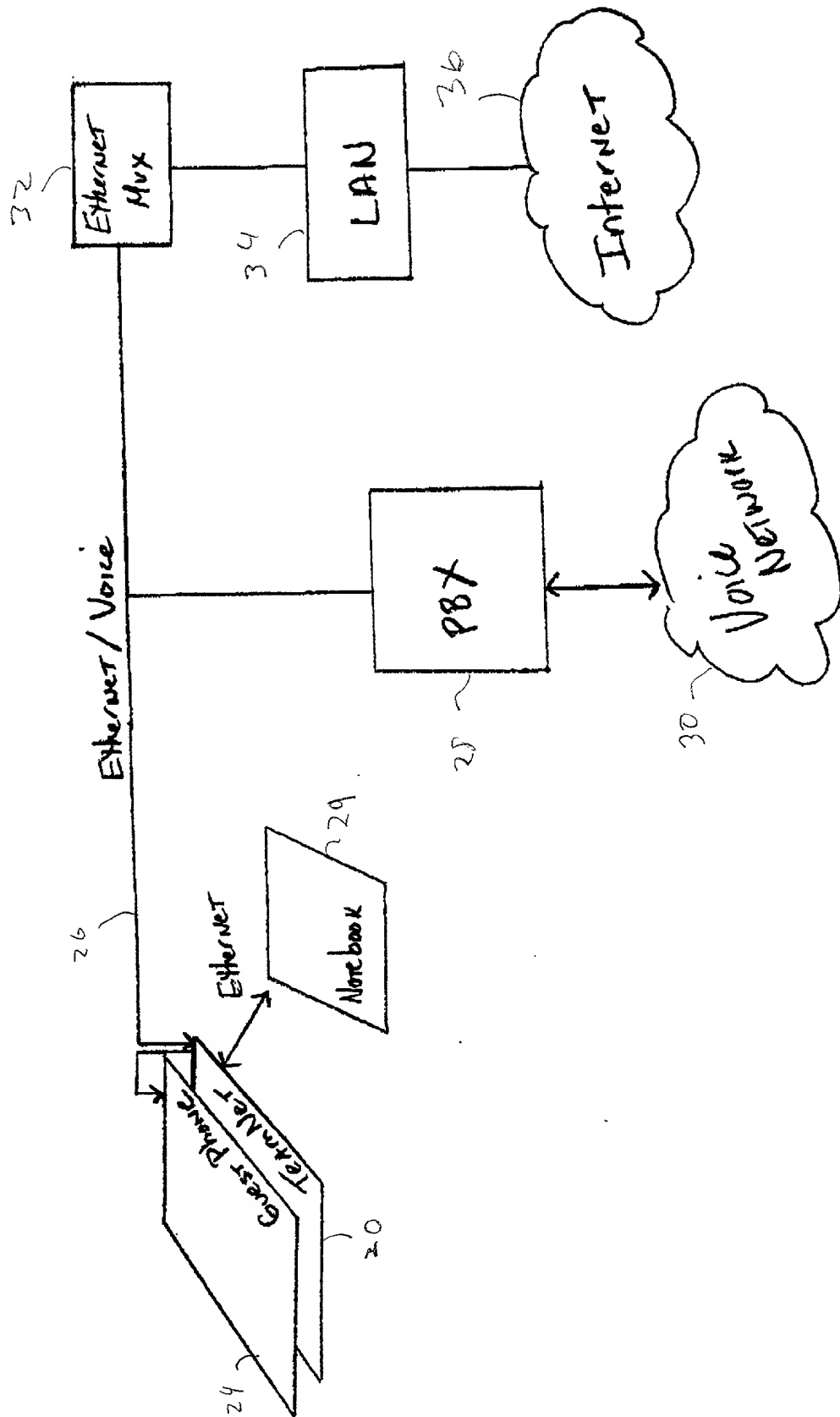


FIGURE 1



0933555-06249  
66T290-595E60

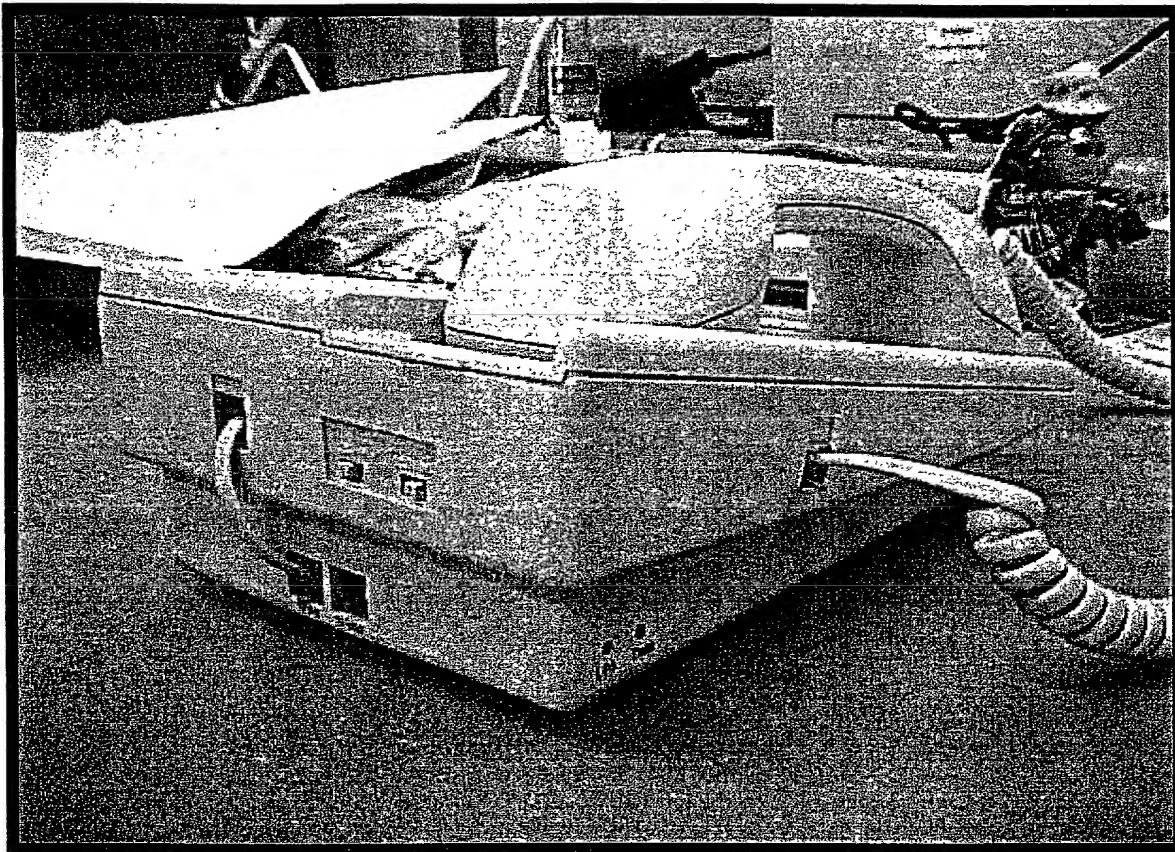


FIGURE 3 A

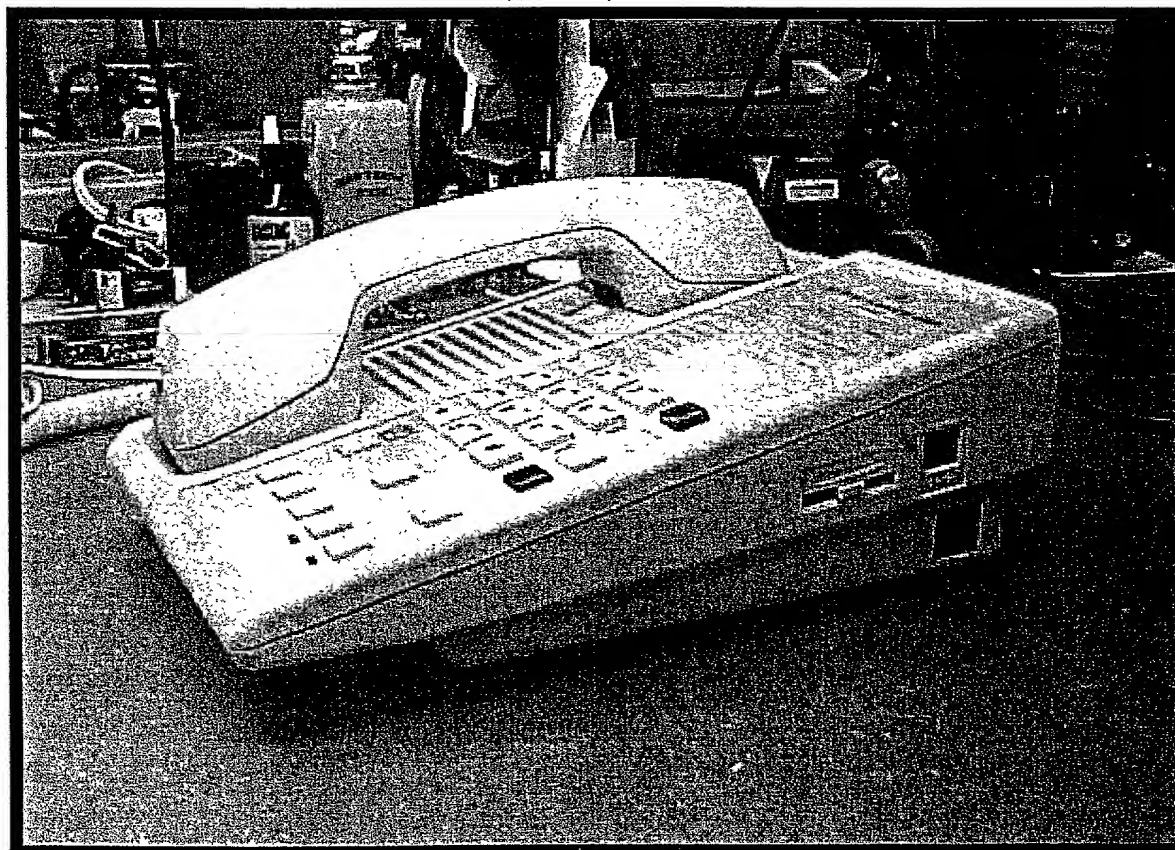
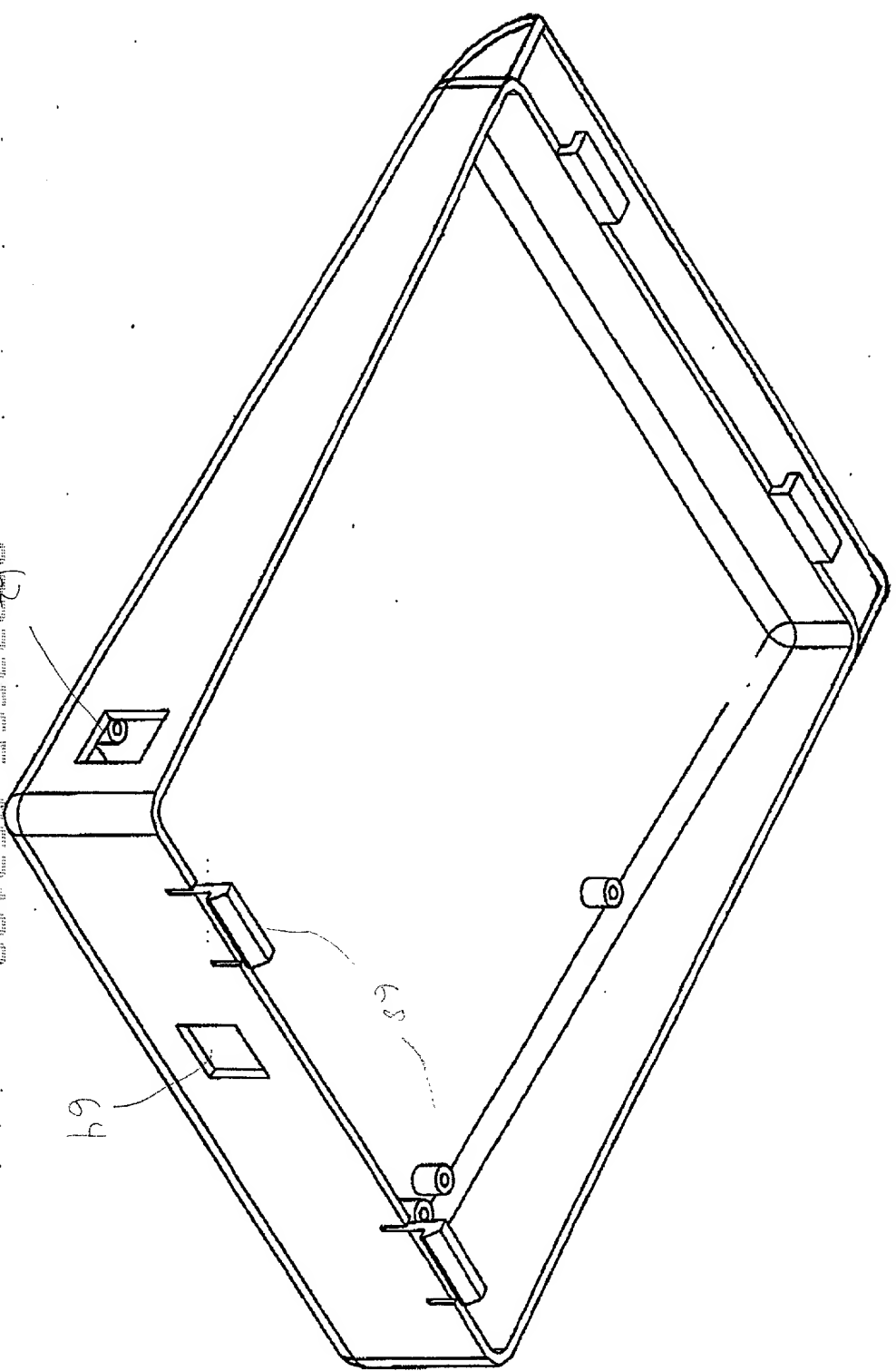


FIGURE 3 B

60



08333565 082199

FIGURE 4

**COMBINED DECLARATION AND POWER OF ATTORNEY  
FOR PATENT APPLICATION**

Attorney's Docket No.

003227-031

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I BELIEVE I AM THE ORIGINAL, FIRST AND SOLE INVENTOR (if only one name is listed below) OR AN ORIGINAL, FIRST AND JOINT INVENTOR (if more than one name is listed below) OF THE SUBJECT MATTER WHICH IS CLAIMED AND FOR WHICH A PATENT IS SOUGHT ON THE INVENTION ENTITLED:

TELEPHONE-COUPLED DEVICE FOR INTERNET ACCESS

the specification of which

(check one)



is attached hereto;



was filed on \_\_\_\_\_ as

Application No. \_\_\_\_\_

and was amended on \_\_\_\_\_;  
(if applicable)

I HAVE REVIEWED AND UNDERSTAND THE CONTENTS OF THE ABOVE-IDENTIFIED SPECIFICATION, INCLUDING THE CLAIM, AS AMENDED BY ANY AMENDMENT REFERRED TO ABOVE;

I ACKNOWLEDGE THE DUTY TO DISCLOSE TO THE OFFICE ALL INFORMATION KNOWN TO ME TO BE MATERIAL TO PATENTABILITY AS DEFINED IN TITLE 37, CODE OF FEDERAL REGULATIONS, Sec. 1.56 (as amended effective March 16, 1992);

I do not know and do not believe the said invention was ever known or used in the United States of America before my or our invention thereof, or patented or described in any printed publication in any country before my or our invention thereof or more than one year prior to said application; that said invention was not in public use or on sale in the United States of America more than one year prior to said application; that said invention has not been patented or made the subject of an inventor's certificate issued before the date of said application in any country foreign to the United States of America on any application filed by me or my legal representatives or assigns more than six months prior to said application;

I hereby claim foreign priority benefits under Title 35, United States Code Sec. 119 and Sec. 172 of any foreign application(s) for patent or inventor's certificate as indicated below and have also identified below any foreign application for patent or inventor's certificate on this invention having a filing date before that of the application(s) on which priority is claimed:

<b>COMBINED DECLARATION AND POWER OF ATTORNEY</b>			Attorney's Docket No. 003227-031																																																																														
COUNTRY/INTERNATIONAL	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED																																																																														
			YES_ NO_																																																																														
			YES_ NO_																																																																														
<p>I hereby appoint the following attorneys and agent(s) to prosecute said application and to transact all business in the Patent and Trademark Office connected therewith and to file, prosecute and to transact all business in connection with international applications directed to said invention:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">William L. Mathis</td> <td style="width: 10%;">17,337</td> <td style="width: 33%;">Robert G. Mukai</td> <td style="width: 10%;">28,531</td> <td style="width: 33%;">Bruce J. Boggs, Jr.</td> <td style="width: 10%;">32,344</td> </tr> <tr> <td>Peter H. Smolka</td> <td>15,913</td> <td>George A. Hovanec, Jr.</td> <td>28,223</td> <td>William H. Benz</td> <td>25,952</td> </tr> <tr> <td>Robert S. Swecker</td> <td>19,885</td> <td>James A. LaBarre</td> <td>28,632</td> <td>Peter K. Skiff</td> <td>31,917</td> </tr> <tr> <td>Platon N. Mandros</td> <td>22,124</td> <td>E. Joseph Gess</td> <td>28,510</td> <td>Richard J. McGrath</td> <td>29,195</td> </tr> <tr> <td>Benton S. Duffett, Jr.</td> <td>22,030</td> <td>R. Danny Huntington</td> <td>27,903</td> <td>Matthew L. Schneider</td> <td>32,814</td> </tr> <tr> <td>Joseph R. Magnone</td> <td>24,239</td> <td>Eric H. Weisblatt</td> <td>30,505</td> <td>Michael G. Savage</td> <td>32,596</td> </tr> <tr> <td>Norman H. Stepno</td> <td>22,716</td> <td>James W. Peterson</td> <td>26,057</td> <td>Gerald F. Swiss</td> <td>30,113</td> </tr> <tr> <td>Ronald L. Grudziecki</td> <td>24,970</td> <td>Teresa Stanek Rea</td> <td>30,427</td> <td>Michael J. Ure</td> <td>33,089</td> </tr> <tr> <td>Frederick G. Michaud, Jr.</td> <td>26,003</td> <td>Robert E. Krebs</td> <td>25,885</td> <td>Charles F. Wieland III</td> <td>33,096</td> </tr> <tr> <td>Alan E. Kopecki</td> <td>25,813</td> <td>Robert M. Schulman</td> <td>31,196</td> <td>Bruce T. Wieder</td> <td>33,815</td> </tr> <tr> <td>Regis E. Slutter</td> <td>26,999</td> <td>William C. Rowland</td> <td>30,888</td> <td>Todd R. Walters</td> <td>34,040</td> </tr> <tr> <td>Samuel C. Miller, III</td> <td>27,360</td> <td>T. Gene Dillahunt</td> <td>25,423</td> <td></td> <td></td> </tr> <tr> <td>Ralph L. Freeland, Jr.</td> <td>16,110</td> <td>Patrick C. Keane</td> <td>32,858</td> <td></td> <td></td> </tr> </table>				William L. Mathis	17,337	Robert G. Mukai	28,531	Bruce J. Boggs, Jr.	32,344	Peter H. Smolka	15,913	George A. Hovanec, Jr.	28,223	William H. Benz	25,952	Robert S. Swecker	19,885	James A. LaBarre	28,632	Peter K. Skiff	31,917	Platon N. Mandros	22,124	E. Joseph Gess	28,510	Richard J. McGrath	29,195	Benton S. Duffett, Jr.	22,030	R. Danny Huntington	27,903	Matthew L. Schneider	32,814	Joseph R. Magnone	24,239	Eric H. Weisblatt	30,505	Michael G. Savage	32,596	Norman H. Stepno	22,716	James W. Peterson	26,057	Gerald F. Swiss	30,113	Ronald L. Grudziecki	24,970	Teresa Stanek Rea	30,427	Michael J. Ure	33,089	Frederick G. Michaud, Jr.	26,003	Robert E. Krebs	25,885	Charles F. Wieland III	33,096	Alan E. Kopecki	25,813	Robert M. Schulman	31,196	Bruce T. Wieder	33,815	Regis E. Slutter	26,999	William C. Rowland	30,888	Todd R. Walters	34,040	Samuel C. Miller, III	27,360	T. Gene Dillahunt	25,423			Ralph L. Freeland, Jr.	16,110	Patrick C. Keane	32,858		
William L. Mathis	17,337	Robert G. Mukai	28,531	Bruce J. Boggs, Jr.	32,344																																																																												
Peter H. Smolka	15,913	George A. Hovanec, Jr.	28,223	William H. Benz	25,952																																																																												
Robert S. Swecker	19,885	James A. LaBarre	28,632	Peter K. Skiff	31,917																																																																												
Platon N. Mandros	22,124	E. Joseph Gess	28,510	Richard J. McGrath	29,195																																																																												
Benton S. Duffett, Jr.	22,030	R. Danny Huntington	27,903	Matthew L. Schneider	32,814																																																																												
Joseph R. Magnone	24,239	Eric H. Weisblatt	30,505	Michael G. Savage	32,596																																																																												
Norman H. Stepno	22,716	James W. Peterson	26,057	Gerald F. Swiss	30,113																																																																												
Ronald L. Grudziecki	24,970	Teresa Stanek Rea	30,427	Michael J. Ure	33,089																																																																												
Frederick G. Michaud, Jr.	26,003	Robert E. Krebs	25,885	Charles F. Wieland III	33,096																																																																												
Alan E. Kopecki	25,813	Robert M. Schulman	31,196	Bruce T. Wieder	33,815																																																																												
Regis E. Slutter	26,999	William C. Rowland	30,888	Todd R. Walters	34,040																																																																												
Samuel C. Miller, III	27,360	T. Gene Dillahunt	25,423																																																																														
Ralph L. Freeland, Jr.	16,110	Patrick C. Keane	32,858																																																																														
<p>and: <u>Joseph P. O'Malley, Reg. No. 36,226</u></p>																																																																																	
<p>Address all correspondence to: <u>Robert E. Krebs</u>  <u>BURNS, DOANE, SWECKER &amp; MATHIS, L.L.P.</u>  <u>P.O. Box 1404</u>  <u>Alexandria, Virginia 22313-1404</u></p>																																																																																	
<p>Address all telephone calls to: <u>Joseph P. O'Malley</u> at (650) 854-7400.</p>																																																																																	
<p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p>																																																																																	
FULL NAME OF SOLE OR FIRST INVENTOR		SIGNATURE	DATE																																																																														
Nicholas Steigelman																																																																																	
RESIDENCE		CITIZENSHIP																																																																															
POST OFFICE ADDRESS																																																																																	
FULL NAME OF SECOND JOINT INVENTOR, IF ANY		SIGNATURE	DATE																																																																														
Ronald S. Lesniak																																																																																	
RESIDENCE		CITIZENSHIP																																																																															
POST OFFICE ADDRESS																																																																																	
FULL NAME OF THIRD JOINT INVENTOR, IF ANY		SIGNATURE	DATE																																																																														
RESIDENCE		CITIZENSHIP																																																																															
POST OFFICE ADDRESS																																																																																	